

SERVICE MANUAL (Basic Information)



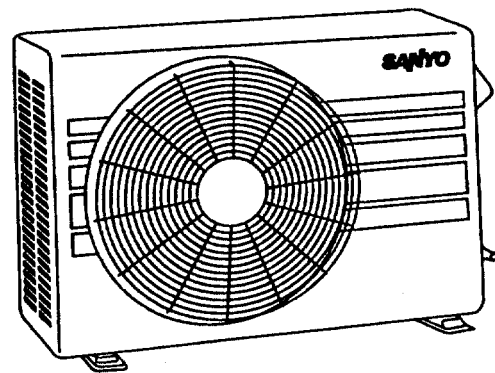
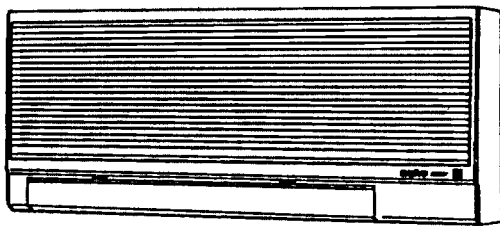
KHS0921 / CH0921
KHS0922 / CH0922
KHS1222 / CH1222

SPLIT SYSTEM AIR CONDITIONER

REVISED

Indoor Unit

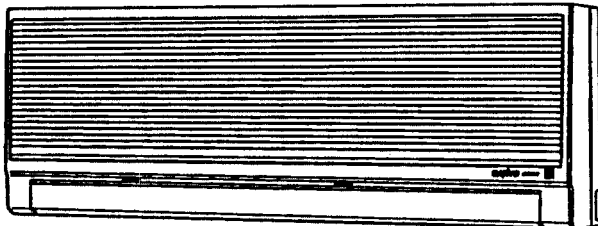
Outdoor Unit



KHS0921 / KHS0922



CH0921 / CH0922 / CH1222



KHS1222



SERVICE MANUAL

KHS0921 / CH0921

KHS0922 / CH0922

KHS1222 / CH1222

(Basic Information)

IMPORTANT! Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning
- Follow each installation or repair step exactly as shown
- Observe all local, state, and national electrical codes
- Pay close attention to all warning and caution notices given in this manual



WARNING:

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION:

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause **accidental injury or death**.
- **Ground the unit** following local electrical codes.
- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing...

...In a Ceiling or Wall

Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

...In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

...In an Area with High Winds

Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

...In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

NOTE:

Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either "narrow" or "wide" rather than as "liquid" or "gas."

When Servicing

- Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.

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1. OPERATING RANGE

KHS0921 / CH0921, KHS0922 / CH0922 and KHS1222 / CH1222

	Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp.
Cooling	Maximum	95°F DB / 71°F WB	115°F DB
	Minimum	67°F DB / 57°F WB	67°F DB
Heating	Maximum	80°F DB / 67°F WB	75°F DB / 65°F WB
	Minimum	— DB / — WB	17°F DB / 15°F WB

2. SPECIFICATIONS

Unit Specifications

Model No.		Indoor unit	KHS0921		
		Outdoor unit	CH0921		
Performance	Capacity	BTU/h	Cooling	Heating	
		kW	9,000	10,800	
	Air circulation (High)	cu. ft./min.	220		
	Moisture removal (High)	Pints/h	2.7		
Electrical Rating	Phase, Frequency	Hz	Single, 60		
	Voltage rating	V	115	115	
	Available voltage range	V	103 to 127	103 to 127	
	Running amperes	A	8.2	8.8	
	Power input	W	930	1,010	
	Power factor	%	99	99	
	Starting amperes	A	49		
	S. E. E. R.	BTU/Wh	10.0		
	Heater element	kW - HSPF	—		
Features	Controls	Microprocessor			
	Control unit	Wireless remote control unit			
	Temperature control	IC thermostat			
	Timer	ON/OFF, 24-hours & Program			
	Fan speeds	Indoor / Outdoor	3 and Auto / 1		
	Air deflector	Horizontal / Vertical	Manual / Manual		
	Air filter	Washable, easy access			
	Compressor	Rotary			
	Refrigerant amount charged at shipment	lbs. (kg)	R22: 2.84 (1.29)		
	Refrigerant control	Capillary tube			
	Refrigerant tubing connections	Flare type			
	Operation sound	In-Hi / Me / Lo	dB-A	40 / 35 / 30	
		Out-Hi	dB-A	49	
	Max. allowable tubing length at shipment	ft. (m)	33 (10)		
	Limit of tubing length	ft. (m)	50 (15)		
	Limit of elevation difference between the 2 units	ft. (m)	Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)		
	Refrigerant tube o.d.	Narrow tube	in. (mm)	1/4 (6.35)	
Wide tube		in. (mm)	3/8 (9.52)		
Refrigerant tube kit	Optional				
Accessories	Mounting bracket				
Dimensions & Weight			Indoor unit	Outdoor unit	
	Height	in. (mm)	13-19/32 (345)	20-7/8 (530)	
	Width	in. (mm)	31-1/2 (800)	29-17/32 (750)	
	Depth	in. (mm)	7-3/32 (180)	11-1/32 (280)	
	Net weight	lbs. (kg)	24.3 (11)	90.4 (41.0)	
	Shipping volume	cu. ft. (cu. m)	3.3 (0.10)	6.7 (0.19)	
	Shipping weight (Approx.)	lbs. (kg)	28.7 (13)	97.1 (44)	

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

Unit Specifications

Model No.		Indoor unit	KHS0922		
		Outdoor unit	CH0922		
Performance	Capacity	BTU/h	Cooling	Heating	
		kW	9,000 / 8,800	10,900 / 10,700	
	Air circulation (High)	cu. ft./min.	220		
	Moisture removal (High)	Pints/h	2.7		
Electrical Rating	Phase, Frequency	Hz	Single, 60		
	Voltage rating	V	230 / 208	230 / 208	
	Available voltage range	V	187 to 253	187 to 253	
	Running amperes	A	4.5 / 4.6	4.7 / 4.8	
	Power input	W	950 / 930	1,030 / 980	
	Power factor	%	92 / 98	96 / 99	
	Starting amperes	A	30		
	S. E. E. R.	BTU/Wh	10.0 / 10.0		
Features	Controls	Microprocessor			
	Control unit	Wireless remote control unit			
	Temperature control	IC thermostat			
	Timer	ON/OFF, 24-hours & Program			
	Fan speeds	Indoor / Outdoor	3 and Auto / 1		
	Air deflector	Horizontal / Vertical	Manual / Manual		
	Air filter	Washable, easy access			
	Compressor	Rotary			
	Refrigerant amount charged at shipment	lbs. (kg)	R22: 2.91 (1.32)		
	Refrigerant control	Capillary tube			
	Refrigerant tubing connections	Flare type			
	Operation sound	In-Hi / Me / Lo	dB-A	40 / 35 / 30	
		Out-Hi	dB-A	49	
	Max. allowable tubing length at shipment	ft. (m)	33 (10)		
	Limit of tubing length	ft. (m)	50 (15)		
	Limit of elevation difference between the 2 units	ft. (m)	Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)		
	Refrigerant tube o.d.	Narrow tube	in. (mm)	1/4 (6.35)	
		Wide tube	in. (mm)	3/8 (9.52)	
Refrigerant tube kit	Optional				
Accessories	Mounting bracket				
Dimensions & Weight	Height	in. (mm)	Indoor unit	Outdoor unit	
			13-19/32 (345)	20-7/8 (530)	
	Width	in. (mm)	31-1/2 (800)	29-17/32 (750)	
	Depth	in. (mm)	7-3/32 (180)	11-1/32 (280)	
	Net weight	lbs. (kg)	24.3 (11)	90.4 (41)	
	Shipping volume	cu. ft. (cu. m)	3.3 (0.10)	6.7 (0.19)	
	Shipping weight (Approx.)	lbs. (kg)	28.7 (13)	97.1 (44)	

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Heating: Outside air temperature 47°F DB/43°F WB

Indoor unit entering air temperature 70°F WB

Unit Specifications

Model No.		Indoor unit		KHS1222			
		Outdoor unit		CH1222			
Performance			Cooling		Heating		
	Capacity			BTU/h		11,400 / 11,200	
				kW		3.34 / 3.28	
	Air circulation (High)		cu. ft./min.		360 / 330		
Moisture removal (High)		Pints/h		4.0			
Electrical Rating	Phase, Frequency		Hz		Single, 60		
	Voltage rating		V		230 / 208		
	Available voltage range		V		187 to 253		
	Running amperes		A		5.6 / 5.9		
	Power input		W		1,210 / 1,180		
	Power factor		%		94 / 97		
	Starting amperes		A		32		
	S. E. E. R.		BTU/Wh		10.0 / 10.0		
	Heat element		kW - HSPF		—		
Features	Controls		Microprocessor				
	Control unit		Wireless remote control unit				
	Temperature control		IC thermostat				
	Timer		ON/OFF, 24-hours & Program				
	Fan speeds		Indoor / Outdoor		3 and Auto / 1		
	Air deflector		Horizontal / Vertical		Manual / Automatic		
	Air filter		Washable, easy access				
	Compressor		Rotary				
	Refrigerant amount charged at shipment		lbs. (kg)		R22: 2.96 / (1.34)		
	Refrigerant control		Capillary tube				
	Refrigerant tubing connections		Flare type				
	Operation sound		In-Hi / Me / Lo		dB-A		
			Out-Hi		dB-A		
	Max. allowable tubing length at shipment		ft. (m)		33 (10)		
	Limit of tubing length		ft. (m)		65 (20)		
	Limit of elevation difference between the 2 units		ft. (m)		Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)		
	Refrigerant tube o.d.		Narrow tube		in. (mm)		
			Wide tube		in. (mm)		
	Refrigerant tube kit		Optional				
	Accessories		Mounting bracket				
Dimensions & Weight			Indoor unit		Outdoor unit		
	Height		in. (mm)		14-3/16 (360)		
	Width		in. (mm)		39-0 (990)		
	Depth		in. (mm)		7-13/16 (198)		
	Net weight		lbs. (kg)		29.8 (13.5)		
	Shipping volume		cu. ft. (cu. m)		4.8 (0.14)		
Shipping weight (Approx.)		lbs. (kg)		37.5 (17)			
				99.3 (45)			

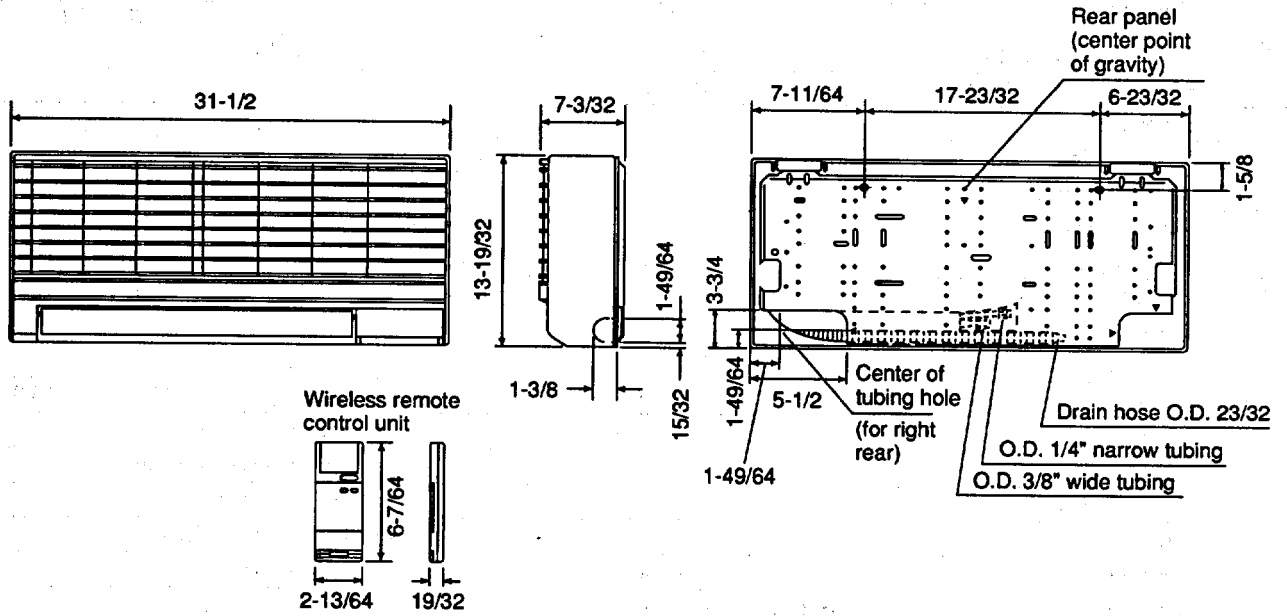
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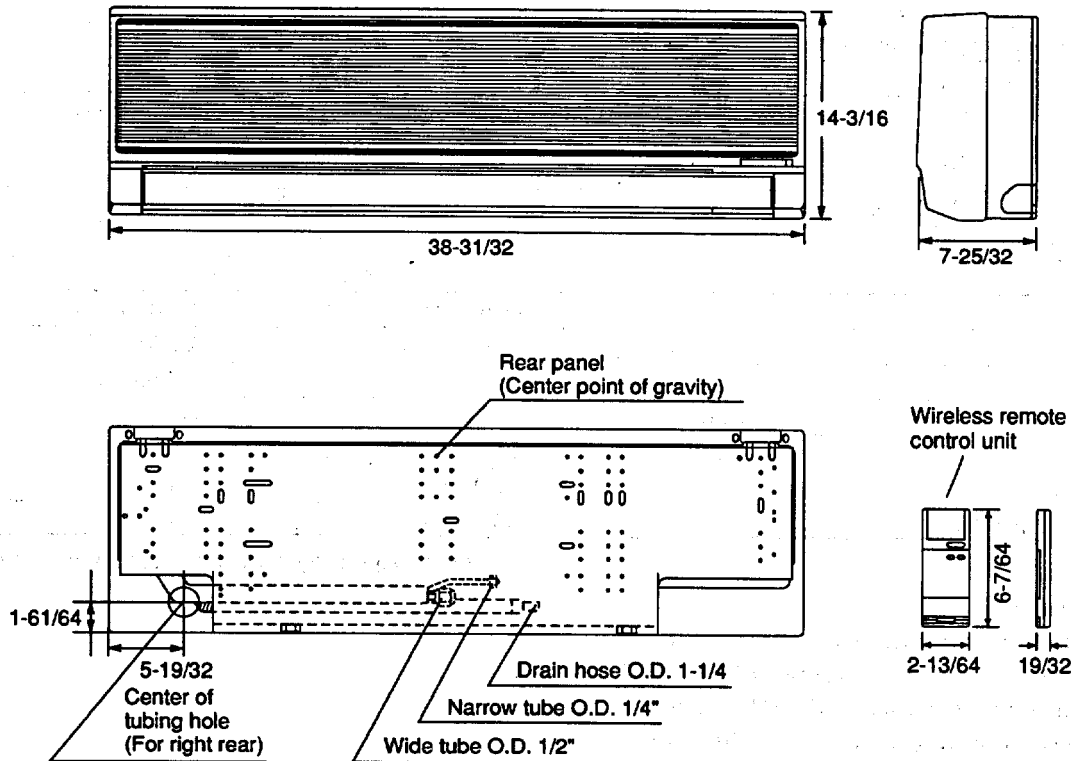
Cooling: Outside air temperature 95°F DB/75°F WB
 Indoor unit entering air temperature 80°F DB/67°F WB
 Heating: Outside air temperature 47°F DB/43°F WB
 Indoor unit entering air temperature 70°F WB

3. DIMENSIONAL DATA

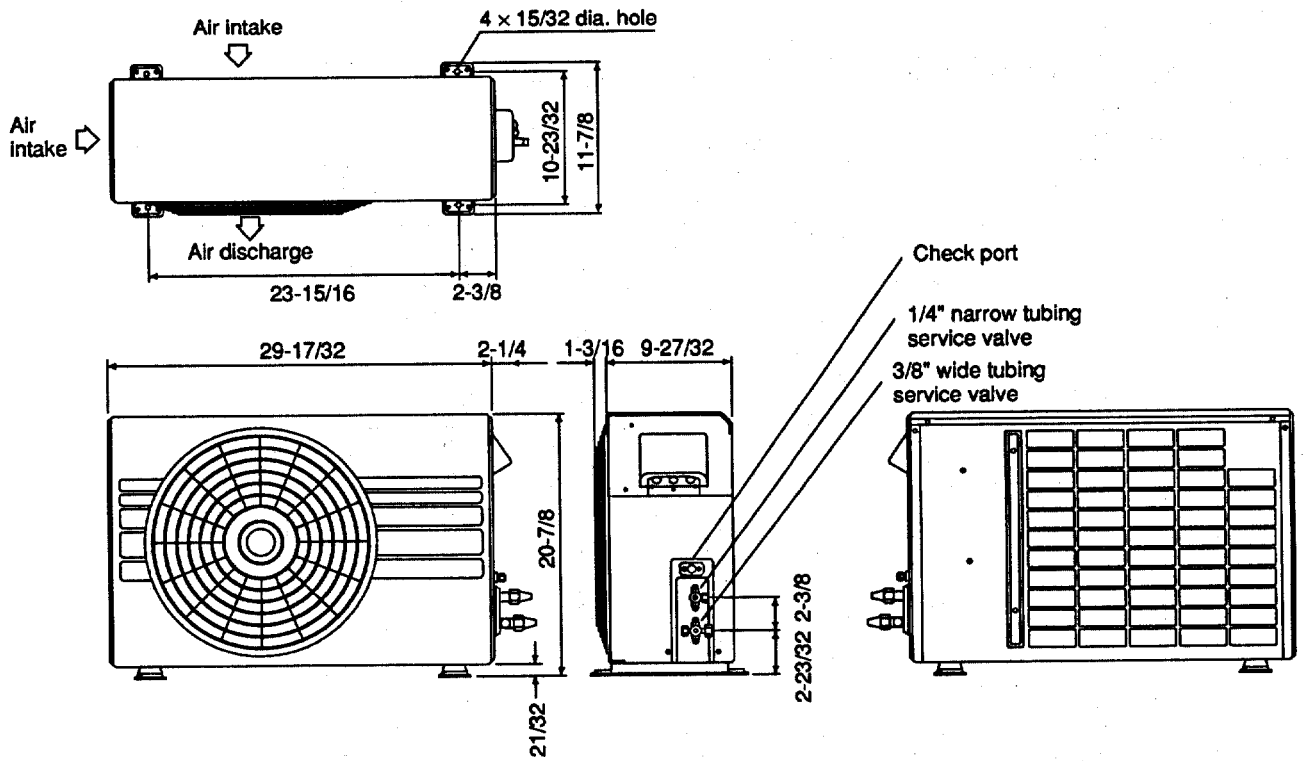
Indoor Unit: KHS0921, KHS0922



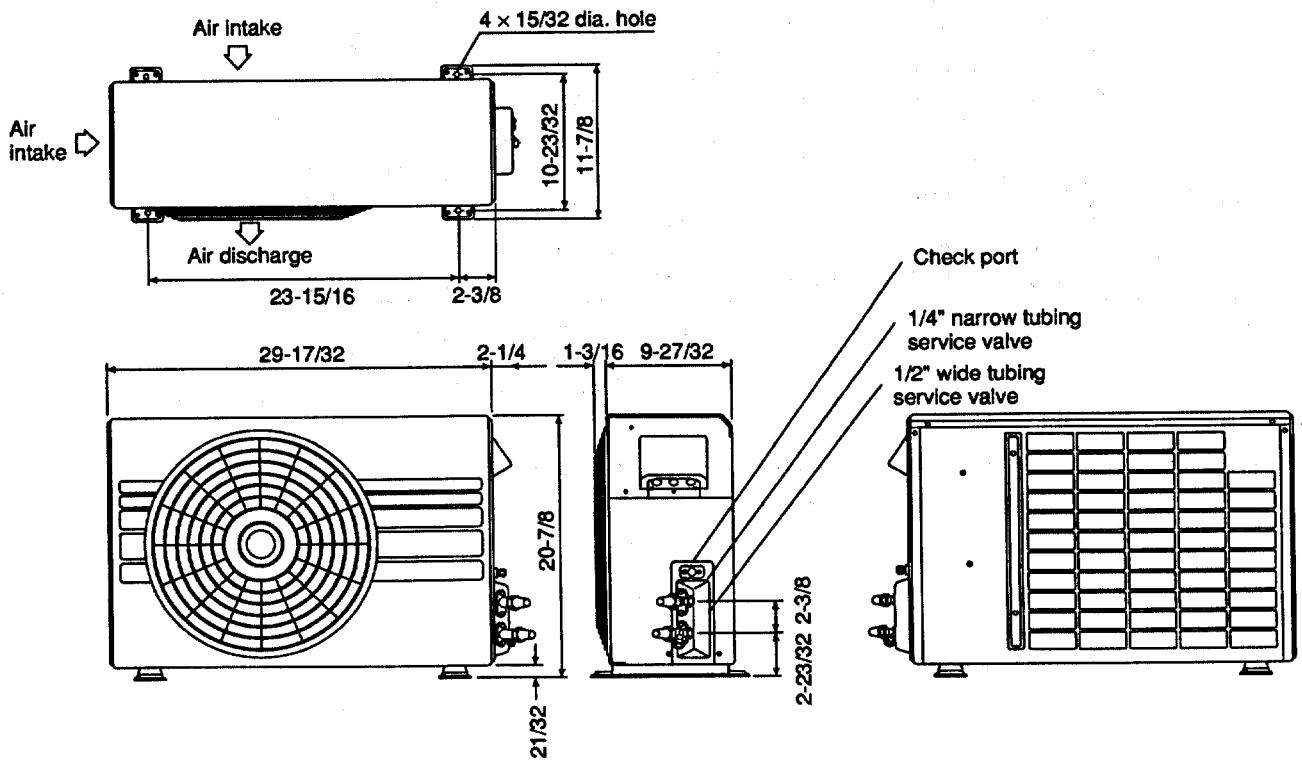
Indoor Unit: KHS1222



Outdoor Unit: CH0921, CH0922



Outdoor Unit: CH1222



4. COOLING CAPACITY

115V

KHS0921 / CH0921

Rating Capacity: 9,000 BTU/H			Air Flow Rate: 220 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC kW	8,910 0.67	8,510 0.73	8,100 0.80	7,640 0.87	7,020 0.95
	72 (22.2)	SHC	6,310	6,090	5,880	5,650	5,340
	76 (24.4)	SHC	7,050	6,830	6,620	6,390	6,080
	80 (26.7)	SHC	7,830	7,610	7,400	7,160	6,850
	84 (28.9)	SHC	8,570	8,350	8,100	7,640	7,020
	88 (31.1)	SHC	8,910	8,510	8,100	7,640	7,020
63 (17.2)		TC kW	9,220 0.68	8,930 0.74	8,580 0.81	8,110 0.88	7,470 0.97
	72 (22.2)	SHC	5,360	5,220	5,050	4,830	4,530
	76 (24.4)	SHC	6,100	5,960	5,790	5,570	5,270
	80 (26.7)	SHC	6,880	6,740	6,570	6,340	6,050
	84 (28.9)	SHC	7,620	7,480	7,310	7,090	6,790
	88 (31.1)	SHC	8,360	8,220	8,050	7,830	7,470
67 (19.4)		TC kW	9,470 0.68	9,320 0.75	*9,000 0.82	8,510 0.89	7,920 0.99
	72 (22.2)	SHC	4,380	4,310	4,170	3,950	3,710
	76 (24.4)	SHC	5,120	5,050	4,910	4,700	4,450
	80 (26.7)	SHC	5,890	5,820	5,690	5,470	5,220
	84 (28.9)	SHC	6,630	6,570	6,430	6,210	5,960
	88 (31.1)	SHC	7,380	7,310	7,170	6,950	6,710
71 (21.7)		TC kW	9,770 0.69	9,600 0.76	9,360 0.83	8,940 0.92	8,420 1.01
	72 (22.2)	SHC	3,370	3,300	3,200	3,040	2,840
	76 (24.4)	SHC	4,110	4,040	3,950	3,780	3,580
	80 (26.7)	SHC	4,880	4,820	4,720	4,550	4,350
	84 (28.9)	SHC	5,630	5,560	5,460	5,300	5,090
	88 (31.1)	SHC	6,370	6,300	6,200	6,040	5,840
75 (23.9)		TC kW	9,950 0.71	9,850 0.77	9,630 0.84	9,290 0.94	8,910 1.04
	76 (24.4)	SHC	3,100	3,060	2,980	2,860	2,730
	80 (26.7)	SHC	3,870	3,830	3,760	3,640	3,500
	84 (28.9)	SHC	4,620	4,580	4,500	4,380	4,240
	88 (31.1)	SHC	5,360	5,320	5,240	5,120	4,990

TC: Total Cooling Capacity (BTU/H)
 SHC: Sensible Heat Capacity (BTU/H)
 kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
 Indoor unit entering air temperature 80°F DB/67°F WB

230V

KHS0922 / CH0922

Rating Capacity: 9,000 BTU/H			Air Flow Rate: 220 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC	8,910	8,510	8,100	7,640	7,020
		kW	0.67	0.73	0.80	0.87	0.95
	72 (22.2)	SHC	6,310	6,090	5,880	5,650	5,340
	76 (24.4)	SHC	7,050	6,830	6,620	6,390	6,080
	80 (26.7)	SHC	7,830	7,610	7,400	7,160	6,850
	84 (28.9)	SHC	8,570	8,350	8,100	7,640	7,020
	88 (31.1)	SHC	8,910	8,510	8,100	7,640	7,020
63 (17.2)		TC	9,220	8,930	8,580	8,110	7,470
		kW	0.68	0.74	0.81	0.88	0.97
	72 (22.2)	SHC	5,360	5,220	5,050	4,830	4,530
	76 (24.4)	SHC	6,100	5,960	5,790	5,570	5,270
	80 (26.7)	SHC	6,880	6,740	6,570	6,340	6,050
	84 (28.9)	SHC	7,620	7,480	7,310	7,090	6,790
	88 (31.1)	SHC	8,360	8,220	8,050	7,830	7,470
67 (19.4)		TC	9,470	9,320	*9,000	8,510	7,920
		kW	0.68	0.75	0.82	0.89	0.99
	72 (22.2)	SHC	4,380	4,310	4,170	3,950	3,710
	76 (24.4)	SHC	5,120	5,050	4,910	4,700	4,450
	80 (26.7)	SHC	5,890	5,820	5,690	5,470	5,220
	84 (28.9)	SHC	6,630	6,570	6,430	6,210	5,960
	88 (31.1)	SHC	7,380	7,310	7,170	6,950	6,710
71 (21.7)		TC	9,770	9,600	9,360	8,940	8,420
		kW	0.69	0.76	0.83	0.92	1.01
	72 (22.2)	SHC	3,370	3,300	3,200	3,040	2,840
	76 (24.4)	SHC	4,110	4,040	3,950	3,780	3,580
	80 (26.7)	SHC	4,880	4,820	4,720	4,550	4,350
	84 (28.9)	SHC	5,630	5,560	5,460	5,300	5,090
	88 (31.1)	SHC	6,370	6,300	6,200	6,040	5,840
75 (23.9)		TC	9,950	9,850	9,630	9,290	8,910
		kW	0.71	0.77	0.84	0.94	1.04
	76 (24.4)	SHC	3,100	3,060	2,980	2,860	2,730
	80 (26.7)	SHC	3,870	3,830	3,760	3,640	3,500
	84 (28.9)	SHC	4,620	4,580	4,500	4,380	4,240
	88 (31.1)	SHC	5,360	5,320	5,240	5,120	4,990

TC: Total Cooling Capacity (BTU/H)
 SHC: Sensible Heat Capacity (BTU/H)
 kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
 Indoor unit entering air temperature 80°F DB/67°F WB

Rating Capacity: 8,800 BTU/H			Air Flow Rate: 210 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC kW	8,710 0.67	8,320 0.73	7,920 0.80	7,470 0.87	6,860 0.95
	72 (22.2)	SHC	6,140	5,930	5,720	5,490	5,190
	76 (24.4)	SHC	6,860	6,640	6,440	6,200	5,900
	80 (26.7)	SHC	7,600	7,390	7,180	6,950	6,650
	84 (28.9)	SHC	8,320	8,100	7,890	7,470	6,860
	88 (31.1)	SHC	8,710	8,320	7,920	7,470	6,860
63 (17.2)		TC kW	9,010 0.68	8,730 0.74	8,390 0.81	7,930 0.88	7,300 0.97
	72 (22.2)	SHC	5,230	5,090	4,920	4,700	4,410
	76 (24.4)	SHC	5,940	5,800	5,630	5,420	5,130
	80 (26.7)	SHC	6,690	6,550	6,380	6,160	5,870
	84 (28.9)	SHC	7,400	7,260	7,090	6,880	6,580
	88 (31.1)	SHC	8,110	7,970	7,810	7,590	7,300
67 (19.4)		TC kW	9,260 0.68	9,110 0.75	*8,800 0.82	8,320 0.89	7,740 0.99
	72 (22.2)	SHC	4,280	4,210	4,070	3,860	3,610
	76 (24.4)	SHC	4,990	4,920	4,780	4,570	4,330
	80 (26.7)	SHC	5,730	5,670	5,530	5,320	5,070
	84 (28.9)	SHC	6,450	6,380	6,240	6,030	5,790
	88 (31.1)	SHC	7,160	7,090	6,960	6,750	6,500
71 (21.7)		TC kW	9,550 0.69	9,390 0.76	9,150 0.83	8,740 0.92	8,230 1.01
	72 (22.2)	SHC	3,300	3,230	3,140	2,970	2,780
	76 (24.4)	SHC	4,010	3,950	3,850	3,690	3,490
	80 (26.7)	SHC	4,760	4,690	4,600	4,430	4,240
	84 (28.9)	SHC	5,470	5,410	5,310	5,150	4,950
	88 (31.1)	SHC	6,190	6,120	6,030	5,860	5,660
75 (23.9)		TC kW	9,730 0.71	9,630 0.77	9,420 0.84	9,080 0.94	8,710 1.04
	76 (24.4)	SHC	3,040	3,000	2,920	2,800	2,670
	80 (26.7)	SHC	3,780	3,740	3,670	3,550	3,420
	84 (28.9)	SHC	4,490	4,460	4,380	4,260	4,130
	88 (31.1)	SHC	5,210	5,170	5,090	4,970	4,840

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
Indoor unit entering air temperature 80°F DB/67°F WB

230V

KHS1222 / CH1222

Rating Capacity: 11,400 BTU/H			Air Flow Rate: 360 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC	11,290	10,770	10,260	9,680	8,890
		kW	0.89	0.97	1.05	1.14	1.25
	72 (22.2)	SHC	8,520	8,270	8,020	7,750	7,380
	76 (24.4)	SHC	9,690	9,440	9,190	8,910	8,540
	80 (26.7)	SHC	10,910	10,650	10,260	9,680	8,890
	84 (28.9)	SHC	11,290	10,770	10,260	9,680	8,890
63 (17.2)	88 (31.1)	SHC	11,290	10,770	10,260	9,680	8,890
		TC	11,670	11,310	10,860	10,270	9,460
		kW	0.89	0.98	1.07	1.16	1.28
	72 (22.2)	SHC	7,110	6,940	6,740	6,480	6,130
	76 (24.4)	SHC	8,270	8,110	7,910	7,650	7,300
	80 (26.7)	SHC	9,490	9,320	9,130	8,870	8,520
67 (19.4)	84 (28.9)	SHC	10,650	10,490	10,290	10,030	9,460
	88 (31.1)	SHC	11,670	11,310	10,860	10,270	9,460
		TC	11,990	11,800	*11,400	10,770	10,030
		kW	0.90	0.99	1.08	1.18	1.31
	72 (22.2)	SHC	5,650	5,570	5,400	5,150	4,860
	76 (24.4)	SHC	6,810	6,730	6,570	6,320	6,020
71 (21.7)	80 (26.7)	SHC	8,030	7,950	7,790	7,530	7,240
	84 (28.9)	SHC	9,200	9,120	8,950	8,700	8,410
	88 (31.1)	SHC	10,360	10,280	10,120	9,860	9,570
		TC	12,370	12,160	11,860	11,320	10,660
		kW	0.91	1.00	1.10	1.21	1.33
	72 (22.2)	SHC	4,150	4,070	3,960	3,760	3,520
75 (23.9)	76 (24.4)	SHC	5,310	5,240	5,120	4,930	4,690
	80 (26.7)	SHC	6,530	6,450	6,340	6,140	5,900
	84 (28.9)	SHC	7,700	7,620	7,500	7,310	7,070
	88 (31.1)	SHC	8,860	8,780	8,670	8,470	8,230
		TC	12,610	12,470	12,200	11,760	11,290
		kW	0.93	1.02	1.11	1.24	1.37
75 (23.9)	76 (24.4)	SHC	3,820	3,780	3,690	3,540	3,390
	80 (26.7)	SHC	5,040	5,000	4,900	4,760	4,600
	84 (28.9)	SHC	6,210	6,160	6,070	5,930	5,770
	88 (31.1)	SHC	7,370	7,330	7,230	7,090	6,930

TC: Total Cooling Capacity (BTU/H)
 SHC: Sensible Heat Capacity (BTU/H)
 kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
 Indoor unit entering air temperature 80°F DB/67°F WB

Rating Capacity: 11,200 BTU/H			Air Flow Rate: 330 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC	11,090	10,580	10,080	9,510	8,740
		kW	0.88	0.96	1.04	1.13	1.24
	72 (22.2)	SHC	8,220	7,970	7,720	7,440	7,080
	76 (24.4)	SHC	9,300	9,050	8,800	8,530	8,160
	80 (26.7)	SHC	10,440	10,190	9,940	9,510	8,740
	84 (28.9)	SHC	11,090	10,580	10,080	9,510	8,740
63 (17.2)		TC	11,470	11,110	10,670	10,090	9,300
		kW	0.89	0.97	1.06	1.15	1.27
	72 (22.2)	SHC	6,890	6,720	6,520	6,260	5,910
	76 (24.4)	SHC	7,970	7,810	7,610	7,350	7,000
	80 (26.7)	SHC	9,100	8,940	8,740	8,480	8,130
	84 (28.9)	SHC	10,190	10,020	9,820	9,560	9,220
67 (19.4)		TC	11,780	11,590	*11,200	10,580	9,860
		kW	0.89	0.98	1.07	1.17	1.29
	72 (22.2)	SHC	5,510	5,430	5,270	5,010	4,720
	76 (24.4)	SHC	6,590	6,510	6,350	6,100	5,810
	80 (26.7)	SHC	7,730	7,650	7,490	7,230	6,940
	84 (28.9)	SHC	8,810	8,730	8,570	8,320	8,020
71 (21.7)		TC	12,150	11,950	11,650	11,120	10,470
		kW	0.90	0.99	1.09	1.20	1.32
	72 (22.2)	SHC	4,100	4,020	3,900	3,710	3,470
	76 (24.4)	SHC	5,180	5,100	4,990	4,790	4,550
	80 (26.7)	SHC	6,310	6,240	6,120	5,930	5,690
	84 (28.9)	SHC	7,400	7,320	7,210	7,010	6,770
75 (23.9)		TC	12,390	12,250	11,980	11,560	11,090
		kW	0.92	1.01	1.10	1.23	1.35
	76 (24.4)	SHC	3,770	3,730	3,640	3,490	3,340
	80 (26.7)	SHC	4,910	4,860	4,770	4,630	4,470
	84 (28.9)	SHC	5,990	5,950	5,860	5,710	5,550
	88 (31.1)	SHC	7,080	7,030	6,940	6,800	6,640

TC: Total Cooling Capacity (BTU/H)

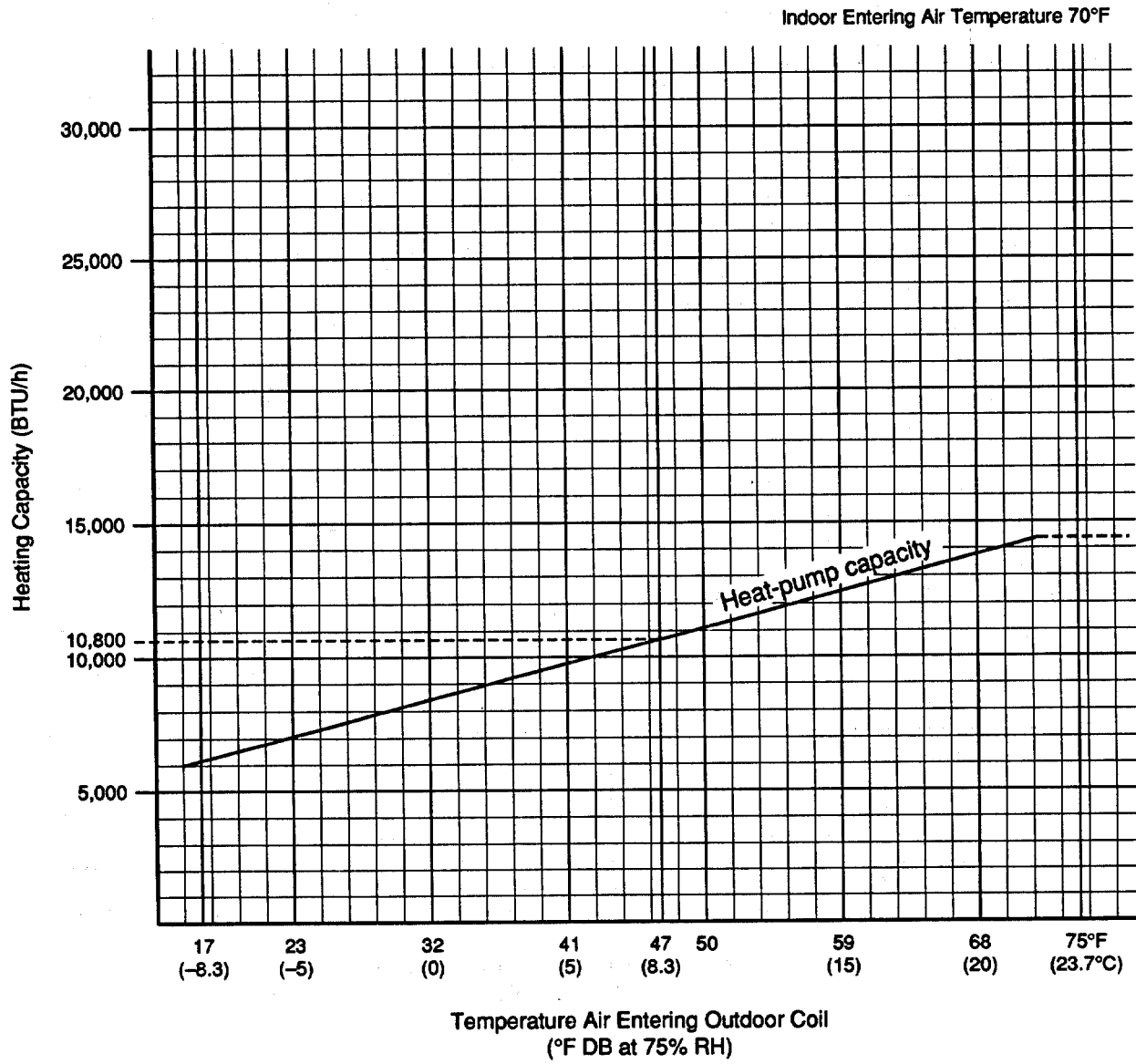
SHC: Sensible Heat Capacity (BTU/H)

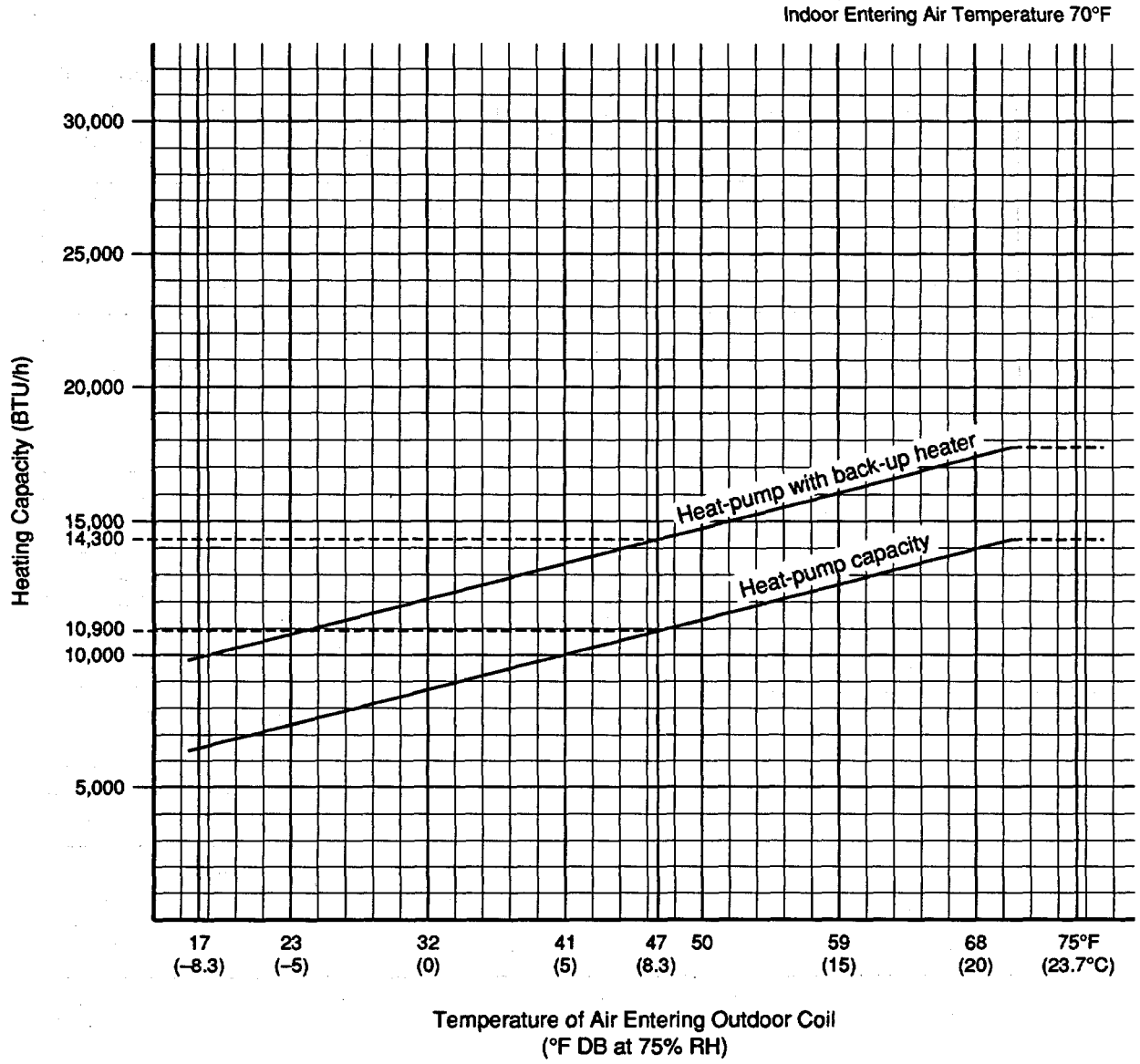
kW: Compressor Input (kW)

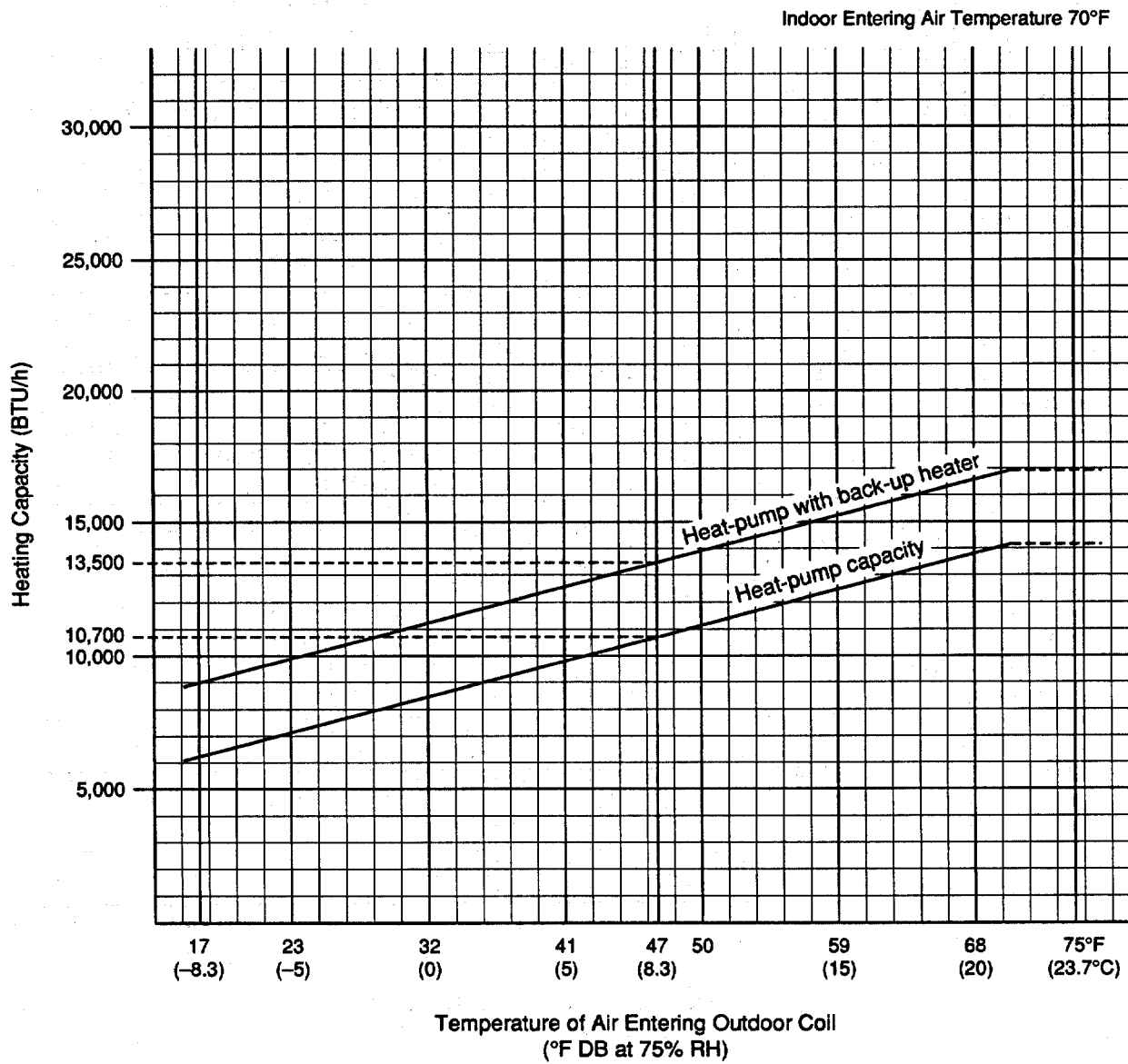
Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
Indoor unit entering air temperature 80°F DB/67°F WB

5. HEATING CAPACITY

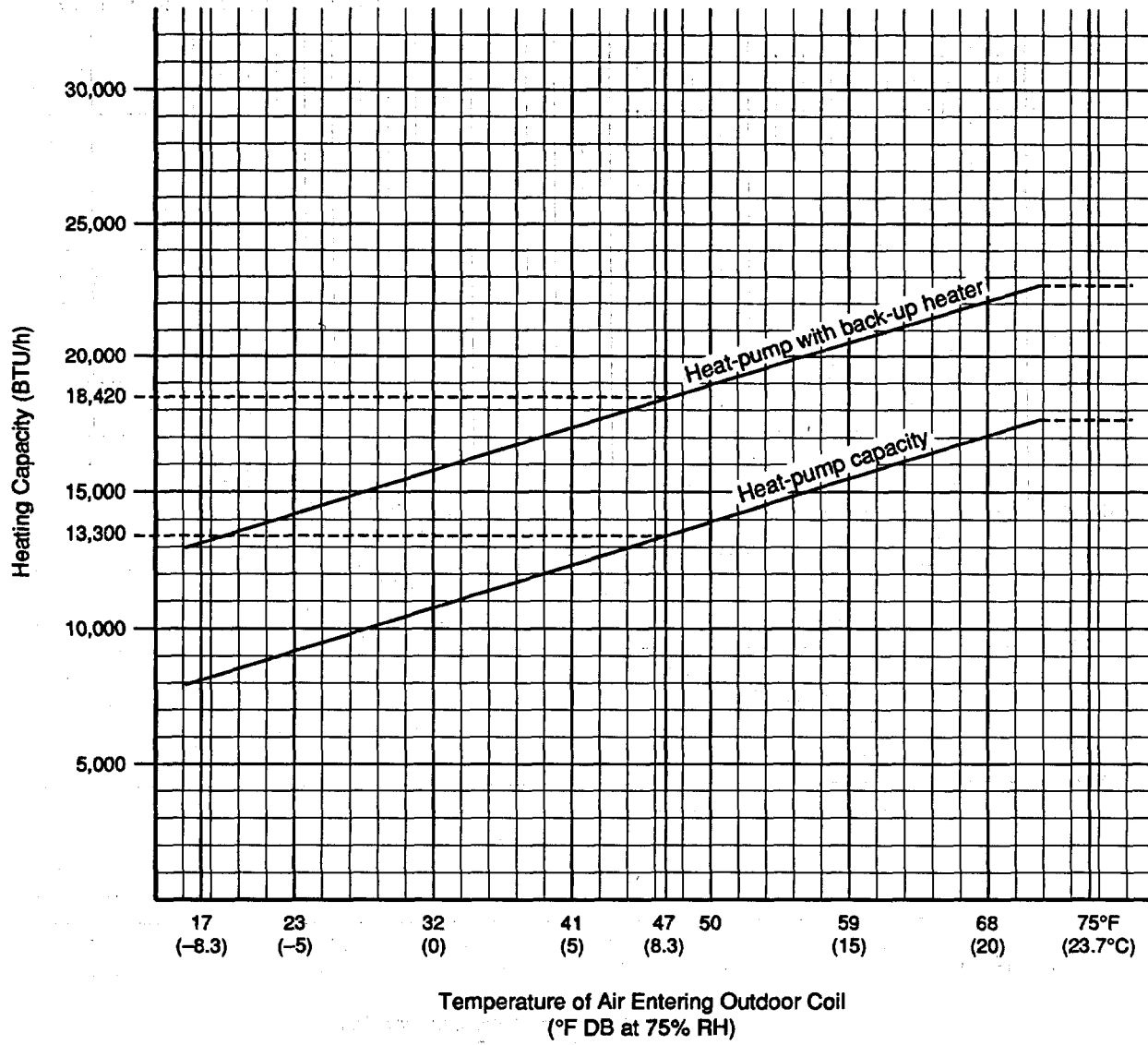
1 Phase 60Hz 115V Model Name: KHS0921

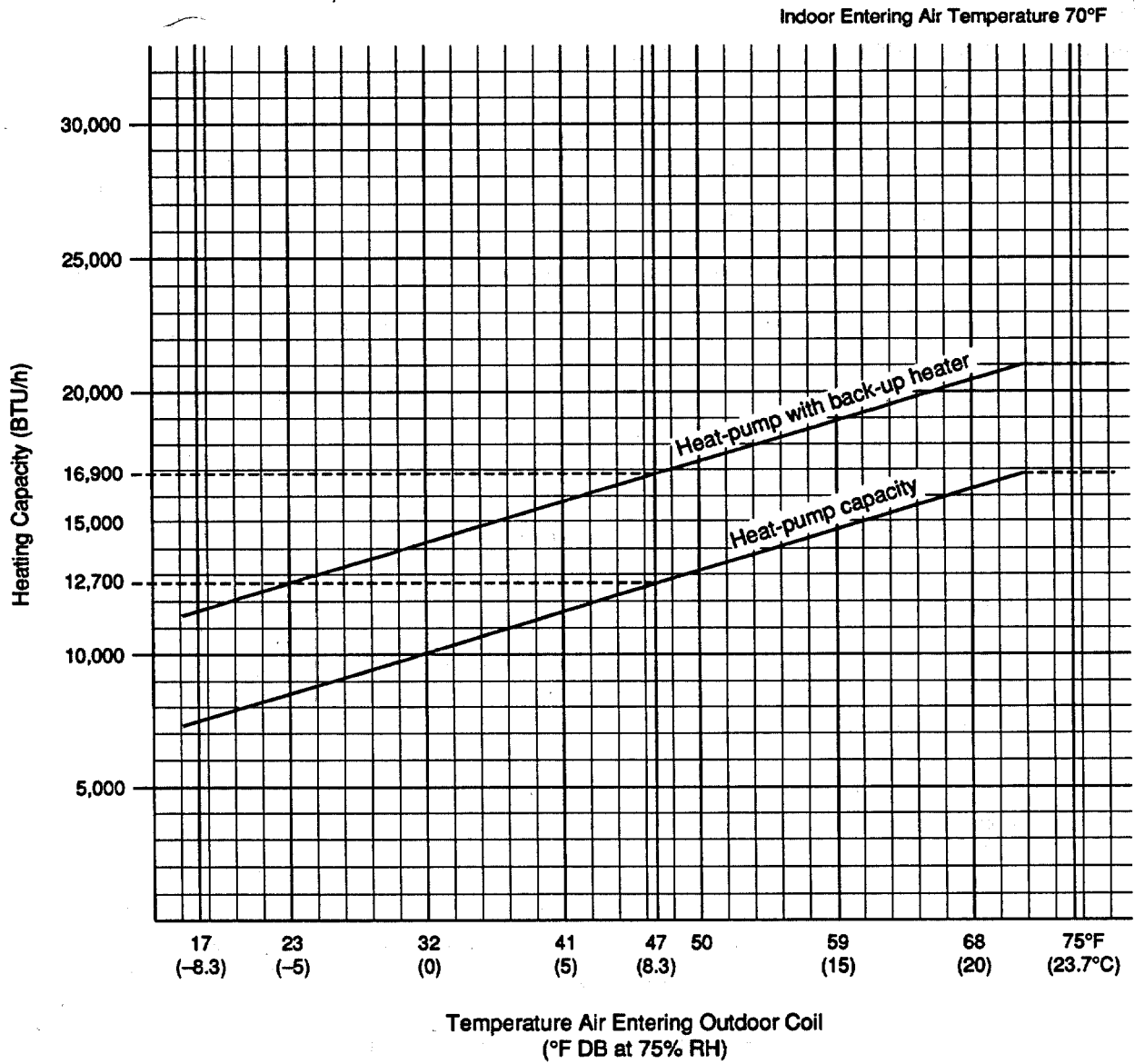






Indoor Entering Air Temperature 70°F

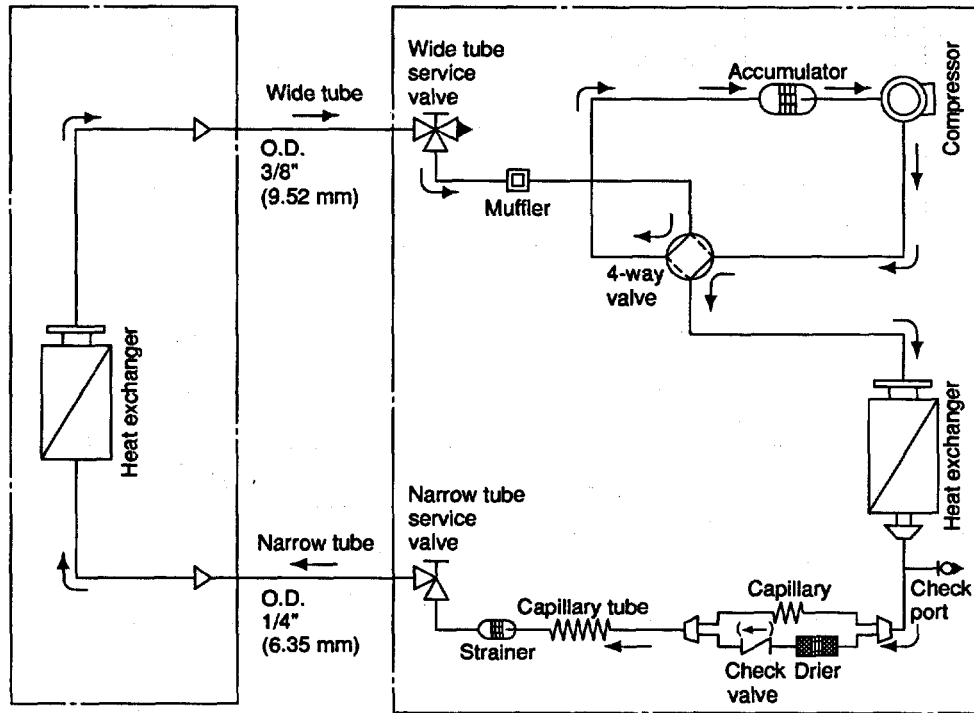




6. REFRIGERANT FLOW DIAGRAM

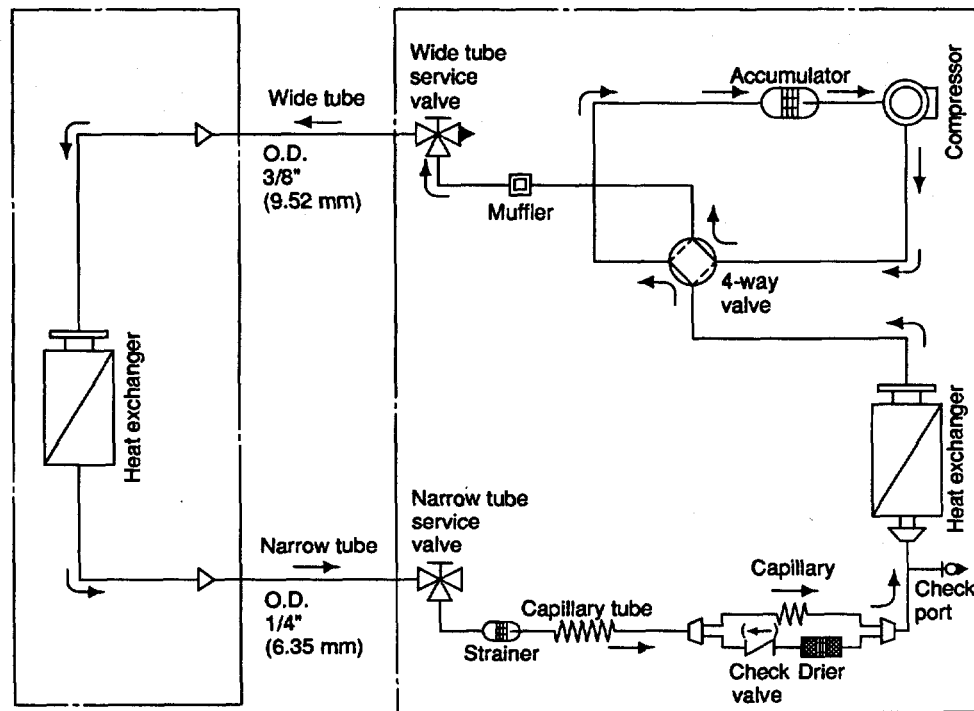
Cooling Cycle

Models: KHS0921 / CH0921, KHS0922 / CH0922



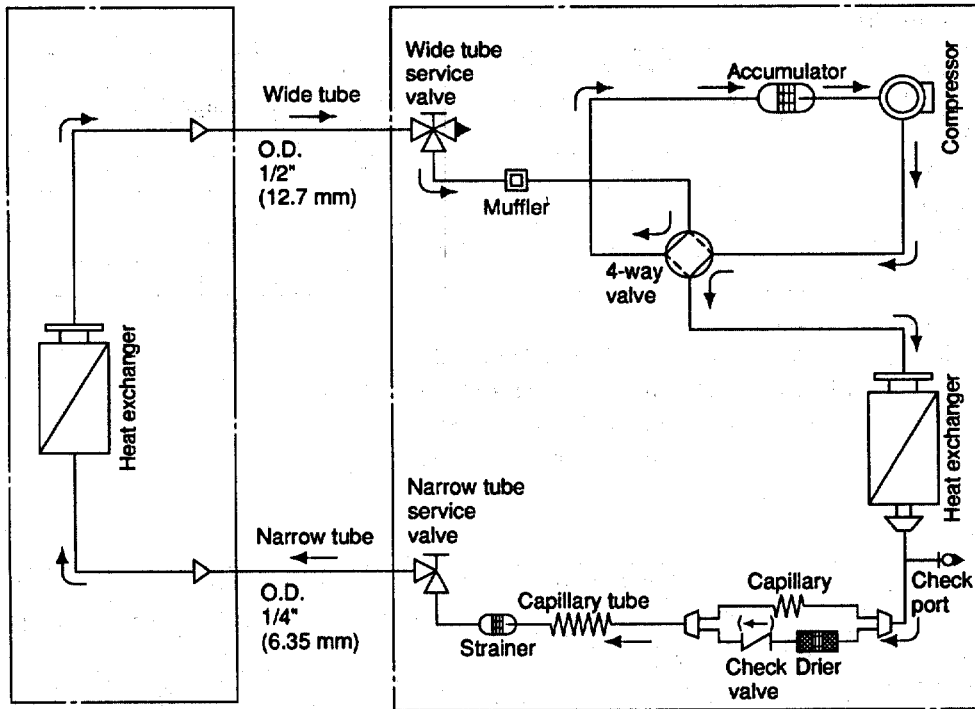
Heating Cycle

Models: KHS0921 / CH0921, KHS0922 / CH0922



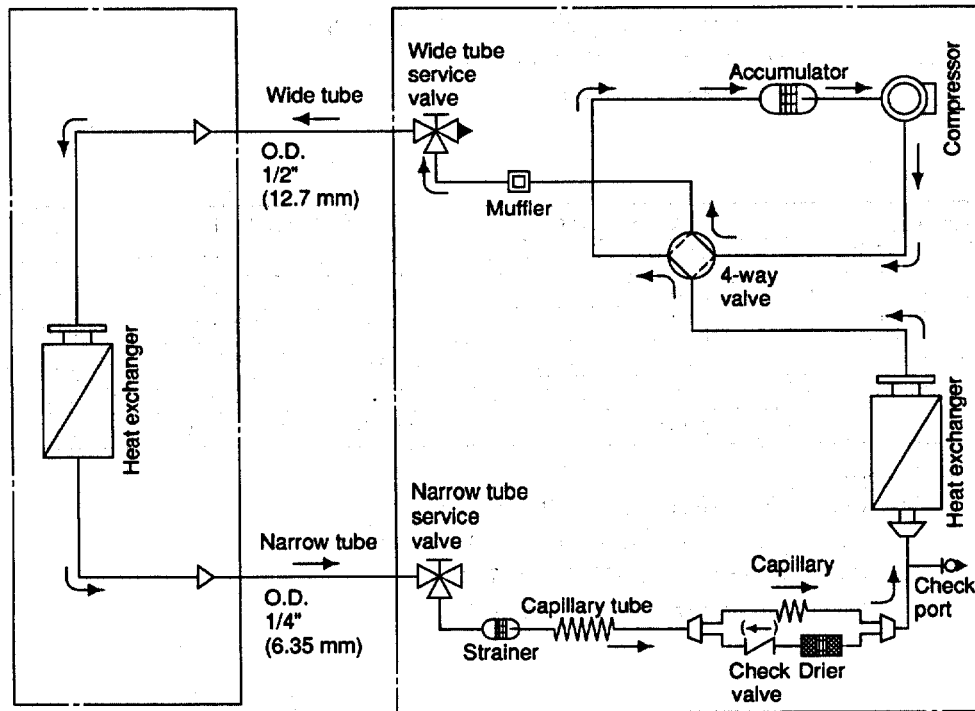
Cooling Cycle

Models: KHS1222 / CH1222



Heating Cycle

Models: KHS1222 / CH1222



7. ELECTRICAL DATA

● Electrical Characteristics

KHS0921 / CH0921

Performance at 115V - 1 ϕ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit	
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat
Cooling	Rating Conditions	A	0.26	—	0.69	7.25	8.2	—
		W	28	—	79	823	930	—
Heating	Rating Conditions	A	0.26	—	0.69	7.85	8.8	—
		W	28	—	79	903	1,010	—
Locked-Rotor Amperes		A	0.31	—	0.87	49	—	—

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

KHS0922 / CH0922

Performance at 230/208V - 1 ϕ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit	
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat
Cooling	Rating Conditions	A	0.15 / 0.14	—	0.42 / 0.39	3.93 / 4.07	4.5 / 4.6	—
		W	34 / 29	—	95 / 80	821 / 821	950 / 930	—
Heating	Rating Conditions	A	0.15 / 0.14	4.35 / 3.93	0.42 / 0.39	4.13 / 4.27	4.7 / 4.8	9.05 / 8.73
		W	34 / 29	1,000 / 818	95 / 80	901 / 871	1,030 / 980	2,030 / 1,798
Locked-Rotor Amperes		A	0.18 / 0.17	—	0.45 / 0.41	30	—	—

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

KHS1222 / CH1222

Performance at 230/208V - 1 ϕ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit	
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat
Cooling	Rating Conditions	A	0.18 / 0.17	—	0.42 / 0.39	5.0 / 5.34	5.6 / 5.9	—
		W	40 / 35	—	95 / 80	1,075 / 1,065	1,210 / 1,180	—
Heating	Rating Conditions	A	0.18 / 0.17	6.52 / 5.90	0.42 / 0.39	4.6 / 4.94	5.2 / 5.5	11.7 / 11.4
		W	40 / 35	1,500 / 1,227	95 / 80	1,055 / 1,025	1,190 / 1,140	2,690 / 2,367
Locked-Rotor Amperes		A	0.21 / 0.18	—	0.45 / 0.41	32	—	—

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

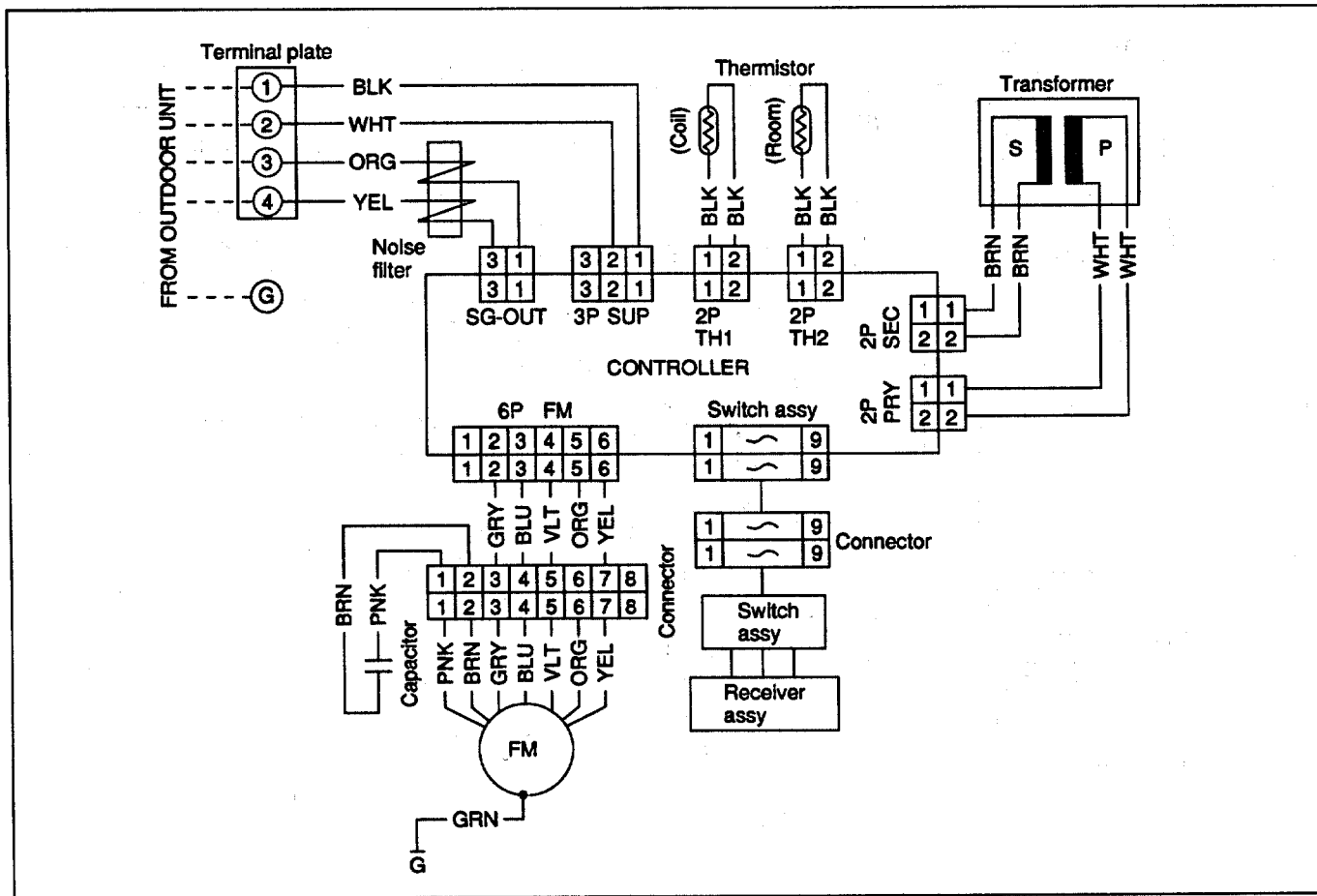
● Electric Wiring Diagram

Indoor Unit: KHS0921



WARNING:

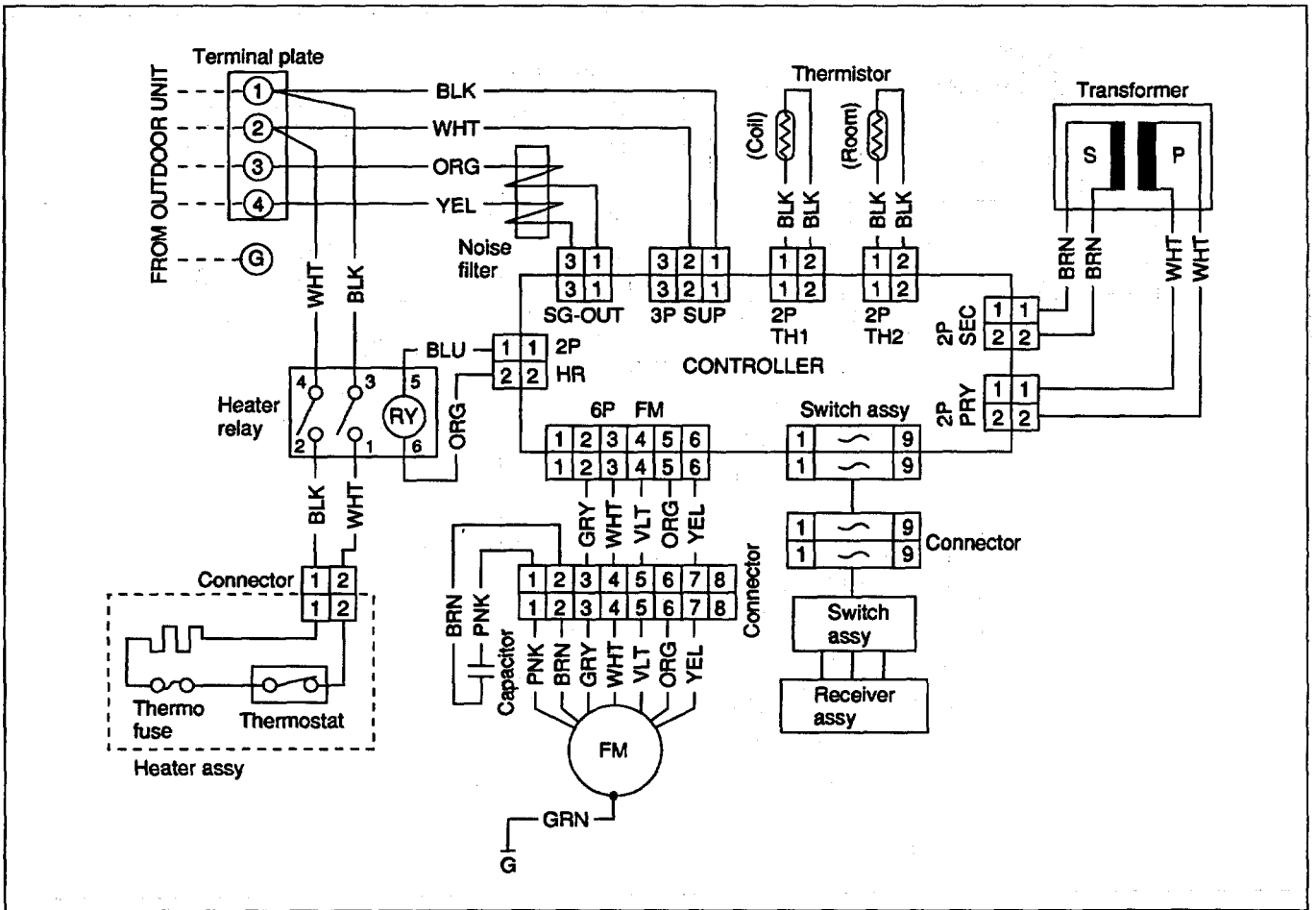
To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.





WARNING:

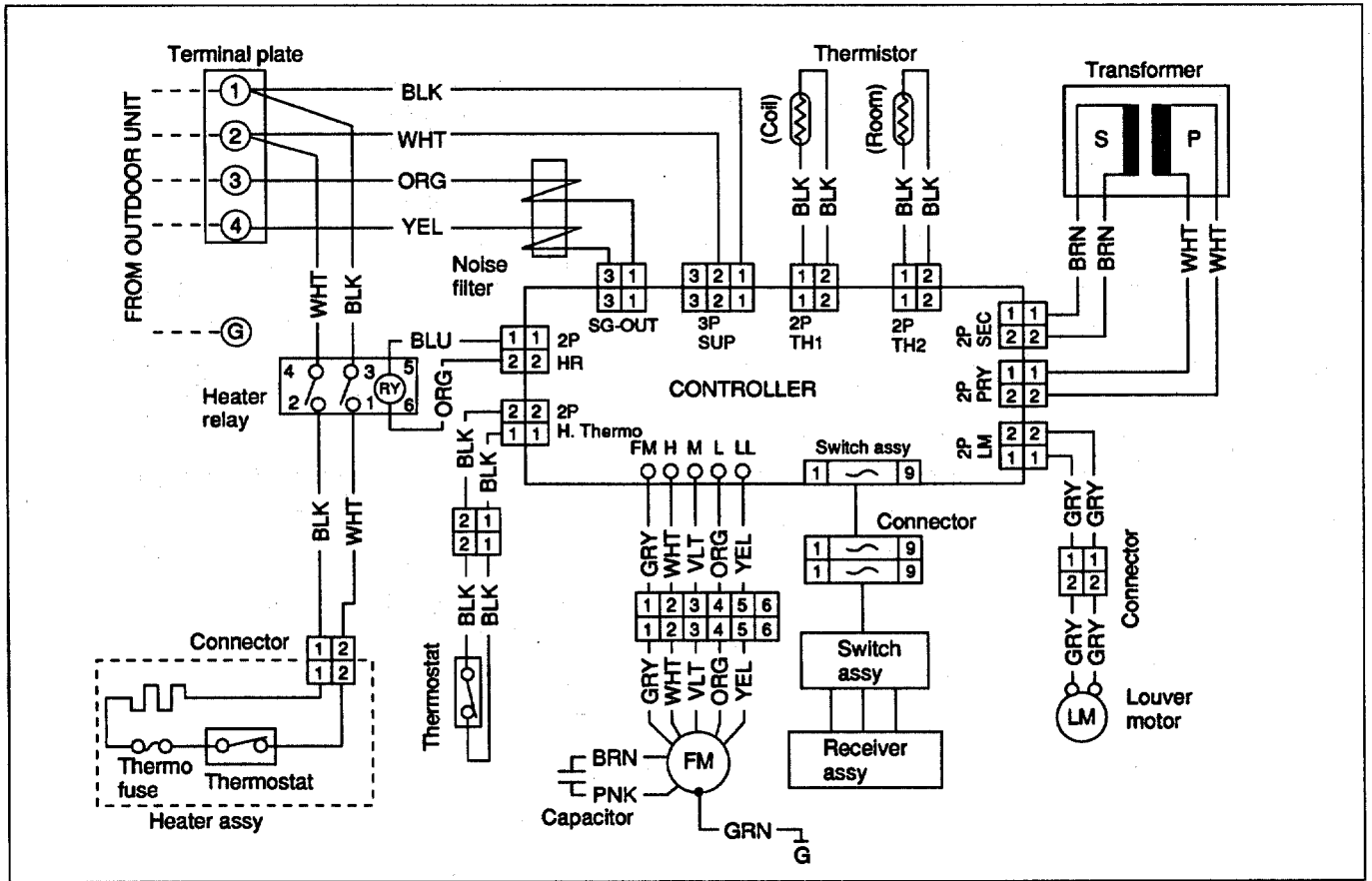
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WARNING

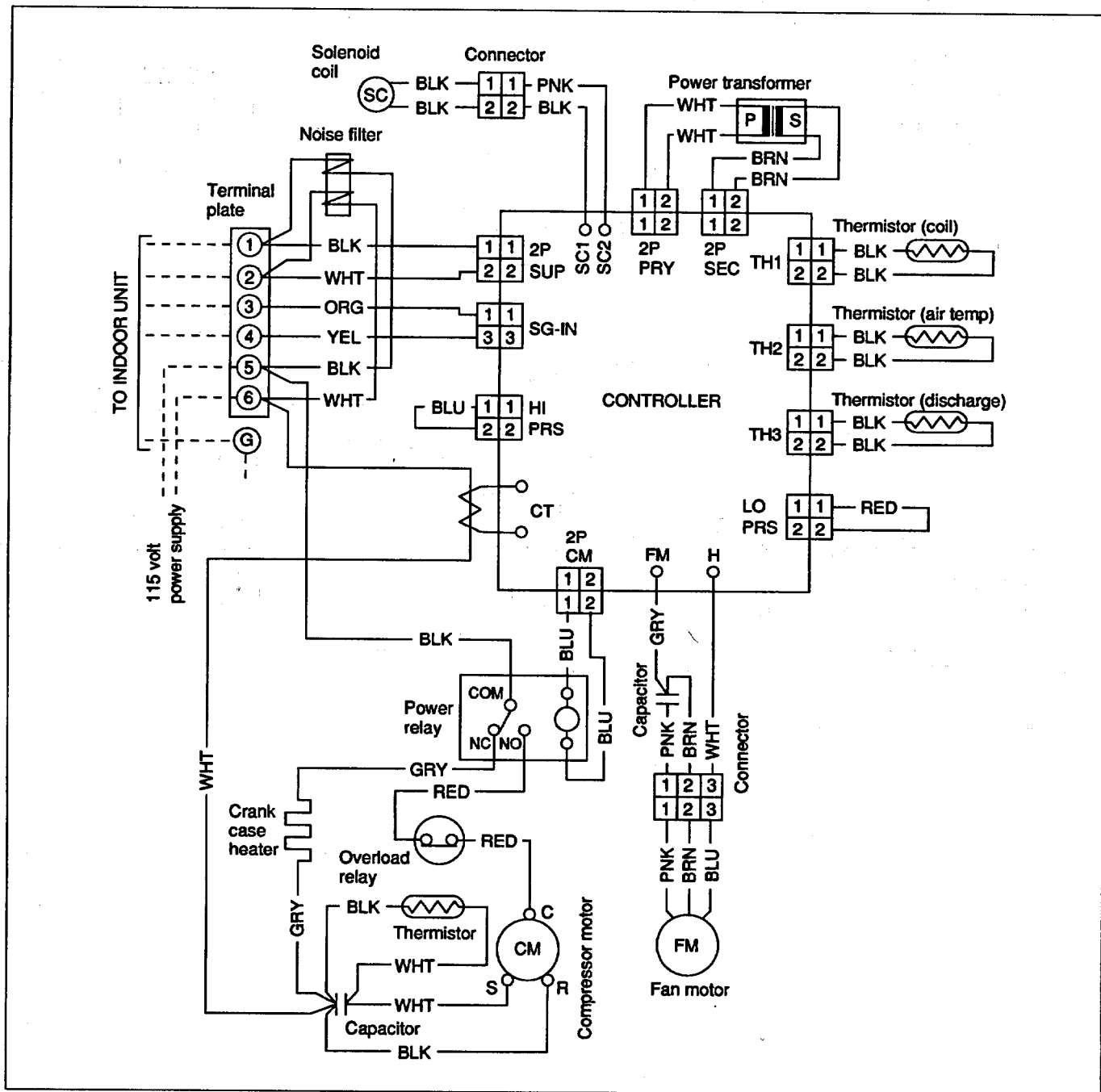
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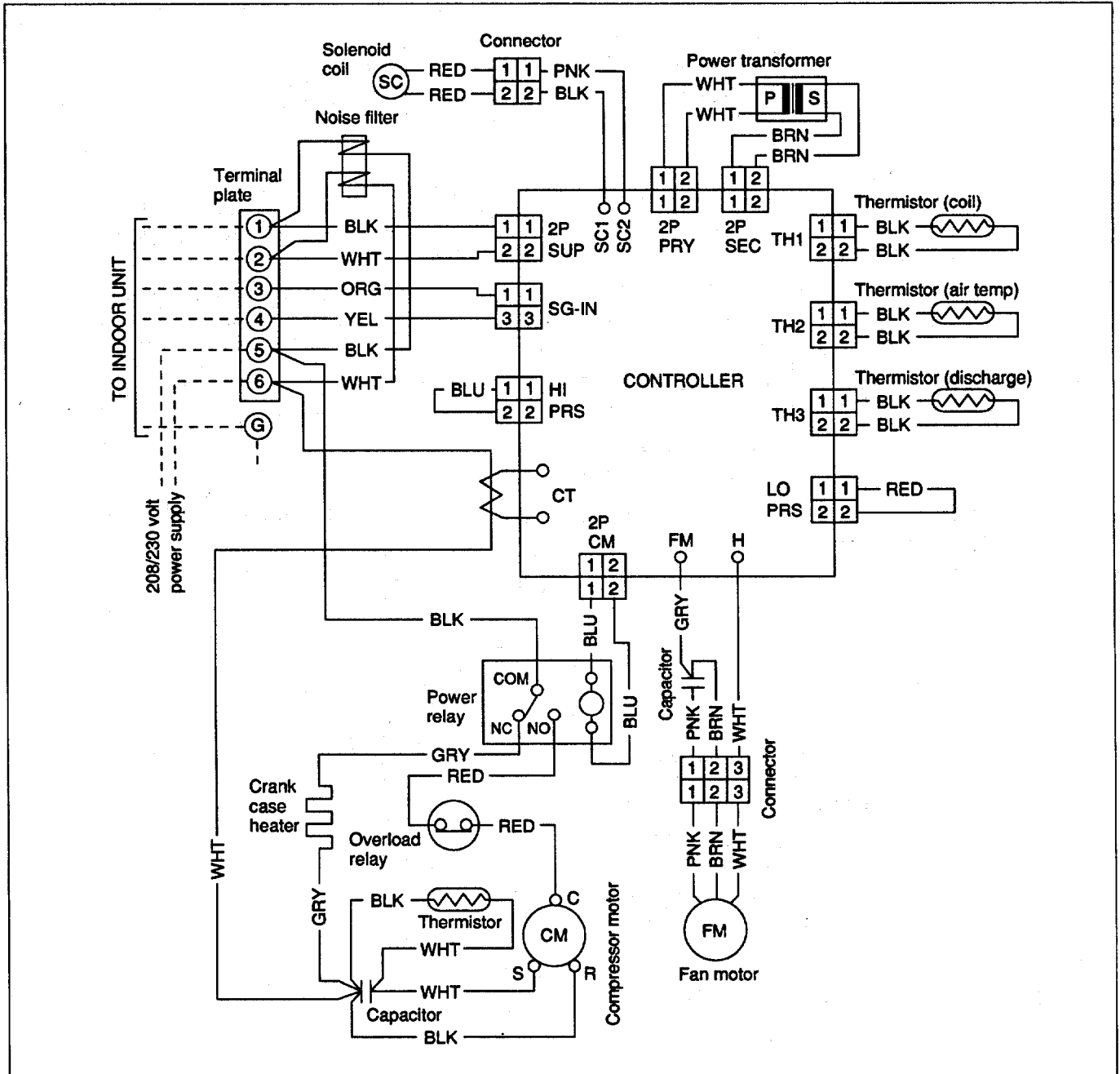
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WARNING

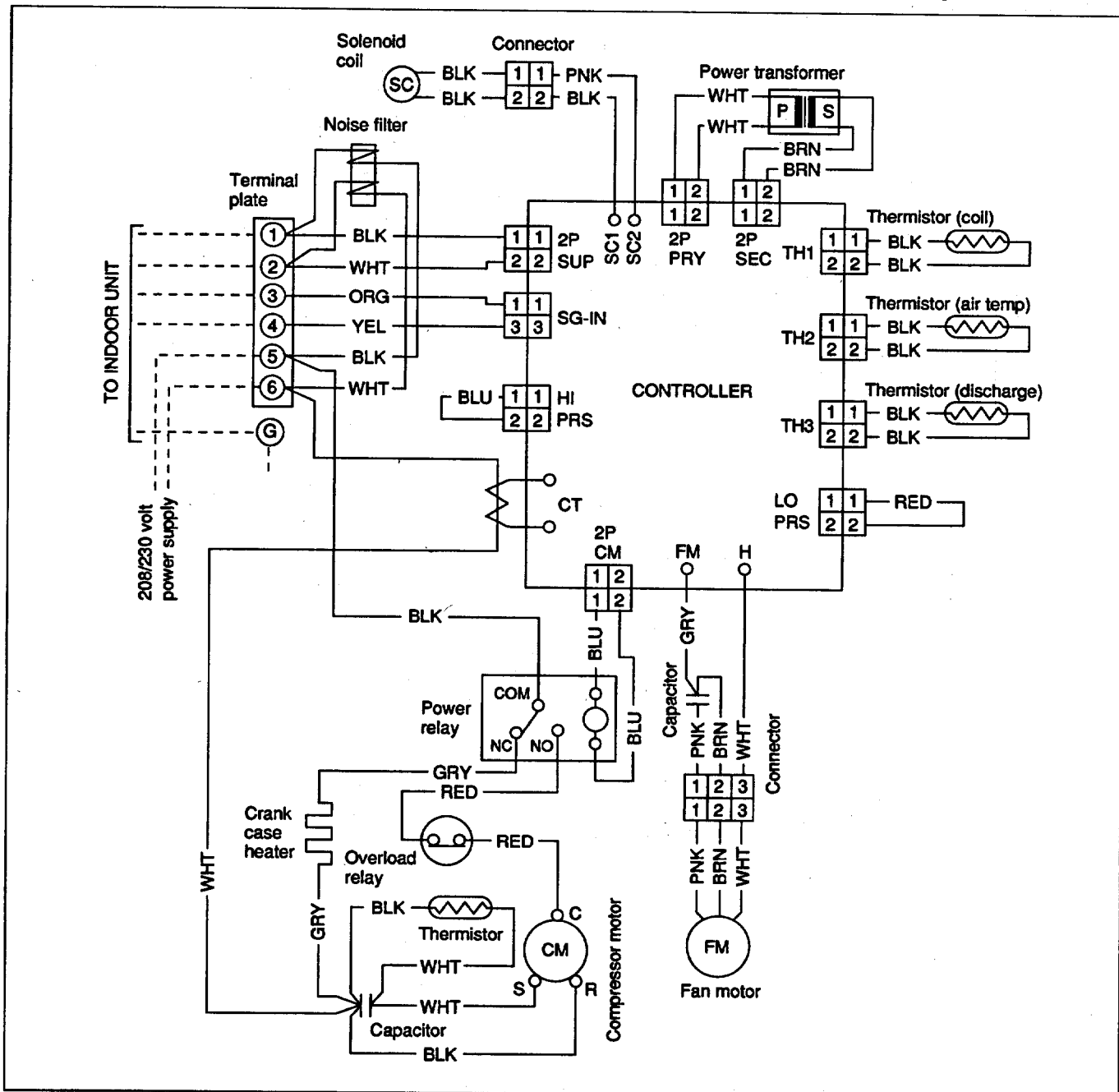
To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.





WARNING:

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.



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